

GILA RIVER BASIN

09447800 BONITA CREEK NEAR MORENCI, AZ

LOCATION.--Lat 32°57'20", long 109°31'50", in SE¹/₄NW¹/₄ sec.36, T.5 S., R.27 E., Graham County, Hydrologic Unit 15040005, on left bank 2.0 mi upstream from intake of City of Safford water supply, 6.3 mi upstream from mouth, and 12.8 mi southwest of Morenci.

DRAINAGE AREA.--302 mi².

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,500 ft above sea level, from topographic map. Two crest-stage gages 440 ft upstream on right and left banks.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,500 ft³/s Jan. 18, 1993, gage height, 16.5 ft, from slope-area measurement of peak flow; minimum daily, 0.66 ft³/s Aug. 31, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 20, 1972, 10,000 ft³/s, from slope-area measurement made by City of Safford at site about 2 mi downstream. Flood of June 27, 1981, 1,340 ft³/s, from slope-area measurement at present site, gage height, 5.6 ft, from floodmark.

Annual peak discharges

Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes	Water year	Date	Annual peak discharge (ft ³ /s)	Discharge codes
1981	08-10-81	1,340		1989	08-07-89	367	
1982	07-29-82	595		1990	08-21-90	1,680	
1983	02-04-83	950		1991	09-05-91	3,220	
1984	10-02-83	19,400		1992	02-14-92	2,000	
1985	12-28-84	269		1993	01-18-93	19,500	
1986	08-20-86	456		1994	09-04-94	1,910	
1987	07-21-87	3,510		1995	01-05-95	5,300	
1988	09-12-88	798		1996	09-11-96	2,020	

GILA RIVER BASIN

09447800 BONITA CREEK NEAR MORENCI, AZ--Continued

MEAN MONTHLY AND ANNUAL DISCHARGES 1981-96

MONTH	MAXIMUM (FT3/S)	MINIMUM (FT3/S)	MEAN (FT3/S)	STAN- DARD DEVIA- TION (FT3/S)	COEFFI- CIENT OF VARI- ATION	PERCENT OF ANNUAL RUNOFF
OCTOBER	176	1.5	16	44	2.7	8.5
NOVEMBER	22	1.9	6.3	4.9	0.78	3.3
DECEMBER	30	5.0	11	7.4	0.68	5.7
JANUARY	769	5.7	71	197	2.8	37
FEBRUARY	165	4.2	34	47	1.4	18
MARCH	54	3.5	16	17	1.0	8.6
APRIL	8.3	2.0	5.1	1.9	0.36	2.7
MAY	6.3	2.1	4.1	1.5	0.36	2.2
JUNE	5.9	1.3	3.2	1.2	0.38	1.7
JULY	14	2.3	5.5	3.5	0.63	2.9
AUGUST	14	4.3	8.3	3.4	0.41	4.4
SEPTEMBER	29	2.5	8.7	7.3	0.84	4.6
ANNUAL	84	4.2	16	20	1.3	100

MAGNITUDE AND PROBABILITY OF ANNUAL LOW FLOW
BASED ON PERIOD OF RECORD 1981-96

PERIOD (CON- SECU- TIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND NON-EXCEEDANCE PROBABILITY, IN PERCENT					
	2 50%	5 20%	10 10%	20 5%	50 2%	100 1%
1	2.1	1.3	0.97	0.72	0.49	0.37
3	2.2	1.4	1.0	0.75	0.52	0.39
7	2.2	1.4	1.1	0.83	0.59	0.46
14	2.4	1.8	1.5	1.3	1.0	0.91
30	2.6	1.9	1.6	1.3	1.1	0.97
60	2.8	2.0	1.7	1.4	1.2	1.0
90	3.1	2.3	1.9	1.7	1.5	1.3
120	3.6	2.9	2.6	2.4	2.1	2.0
183	4.9	4.2	3.8	3.6	3.3	3.2

MAGNITUDE AND PROBABILITY OF ANNUAL HIGH FLOW
BASED ON PERIOD OF RECORD 1981-96

MAGNITUDE AND PROBABILITY OF INSTANTANEOUS PEAK FLOW
BASED ON PERIOD OF RECORD 1981-96

DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
2,320	5,680	9,070	15,000	20,600	27,600
WEIGHTED SKEW (LOGS)= 0.00					
MEAN (LOGS)= 3.36					
STANDARD DEV. (LOGS)= 0.46					

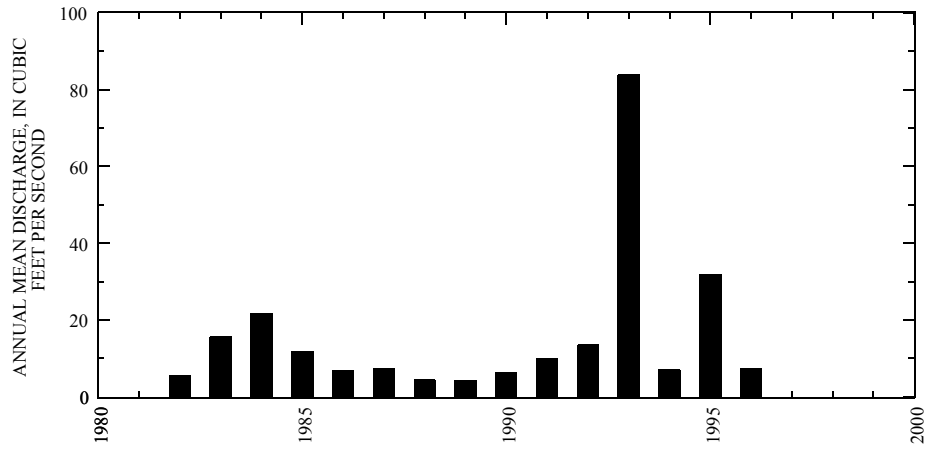
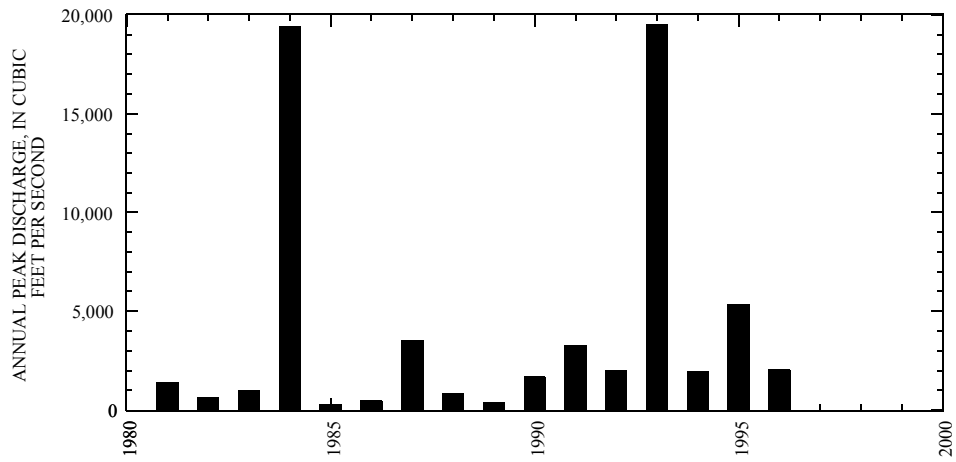
PERIOD (CON- SECU- TIVE DAYS)	DISCHARGE, IN FT3/S, FOR INDICATED RECURRENCE INTERVAL, IN YEARS, AND EXCEEDANCE PROBABILITY, IN PERCENT					
	2 50%	5 20%	10 10%	25 4%	50 2%	100 1%
1	271	1,140	2,720	7,640	15,700	31,200
3	157	644	1,490	3,920	7,670	14,500
7	96	359	771	1,850	3,350	5,840
15	55	202	438	1,080	2,020	3,660
30	33	111	230	545	996	1,770
60	23	71	142	324	581	1,020
90	18	53	103	228	402	691

DURATION TABLE OF DAILY MEAN FLOW FOR PERIOD OF RECORD 1981-96

DISCHARGE, IN FT3/S, WHICH WAS EQUALED OR EXCEEDED FOR INDICATED PERCENT OF TIME																
1%	5%	10%	15%	20%	30%	40%	50%	60%	70%	80%	90%	95%	98%	99%	99.5%	99.9%
189	23	9.9	7.2	6.1	5.7	5.3	4.6	4.2	3.1	3.1	2.4	1.9	0.00	0.00	0.00	0.00

GILA RIVER BASIN

09447800 BONITA CREEK NEAR MORENCI, AZ--Continued



GILA RIVER BASIN

09447800 BONITA CREEK NEAR MORENCI, AZ--Continued

